U.S. COAST GUARD



SHIP-HELO



NEWSLETTER

Fall 2003 Volume 04-03



HH-65A Coming Aboard USCGC Midgett

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RECOMMENDED CUTTER DISTRIBUTION

TITLE	DATE	INITIAL
CO		
XO		
OPS		
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1 ST LT		
DCA		
AUX CPO		
ALL FLT OPS BILLETS		

RECOMMENDED AIR STATION DISTRIBUTION

TITLE	DATE	INITIAL
СО		
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OPS		
EO		
ALL 65 & 60 PILOTS		
ALL 60 & 65 Crew		
ALL Flight Ops Billets		

The Ship-Helo Newsletter is published to assist in providing clarity of ship-helo operations and procedures. It <u>does not</u> set policy, but rather seeks to enhance policy and assist you in following it.



Each person/entity receiving a Ship-Helo Newsletter can help to provide the most up to date ship-helo information, assistance and tips to our customers by making the Ship-Helo Newsletter available to <u>all</u> personnel who have responsibilities involving flight operations with or onboard cutters.



Ship-Helo Stan Scheduling

Hello again. In the course of any given week, I receive several telephone calls and email messages asking how to schedule a visit from the Ship-Helo STAN team. More often than not, these calls are from a poor harried soul who has just signed a relief letter and has just taken responsibility for a new job. Invariably, these calls and messages include long tales of woe as to how extremely busy the ship is, how many missions have been piled on the cutter, and how very little time there is to accomplish the required training. Make no

mistake, I FEEL YOUR PAIN. Just so you know, out of the 8760 hours in a standard year, you are expected to be underway for 5280 of them. That leaves you 3480 hours of inport time to maintain the ship, grant liberty, In case you were and conduct training. wondering, an H-65 is programmed to fly an annual total of 640 hours. So, the Ship-Helo STAN takes three days. The first two days are conducted at the pier and day three is underway. The reality is that we take up about 20 inport hours and 10 underway hours of your time every other year, so much for pain!

Now for the scheduling part: You already spend much time with your AREA scheduling officer working on the finer points of the where and when your ship has to be. Well, this same individual is the one I work with when deciding when is the best time to conduct your STAN visit. The process is for you to contact your cutter scheduler and hammer out when is best for you and how that fits in with the other cutters in the fleet. Your AREA scheduler and I then spend much time talking with each other trying to work out when works for you and when works for us. We do everything we can to work around whatever conflict there might be to make this as painless as possible. At present, the LANT scheduler is LCDR TIM DARLEY at 757-The PAC scheduler is AMT1 398-6466 DAVE KINNEY at 510-437-5357.

The Ship-Helo branch is billeted for three STAN teams, which might seem like we have lots of time and can work out almost any scheduling problem, and generally we can. The reality is that it seems like you all want your STAN at the same time. For example, between now and Christmas, every week we have someone "on the road." It works out that all three teams are gone at the same time. Even with three major holidays between now and 2004, there are eleven missions presently

scheduled, and three more probable trips on the horizon.

So, when is the best time for you STAN??? Well, if you do your STAN as you return from a patrol, you seem to breeze right through the training. I'm not a big fan of that school of thought because of all the transfers that occur during any inport. If you do your STAN just prior to departing for a patrol you get the best possible use out of the training, and an entire patrol to put the training to good use. The downside is that it usually cuts into the last two days of inport liberty before a patrol. For my money though, it's a much better option. Another popular option is to schedule your STAN during a mid-patrol break. This solves the liberty problem, but because you're away from your homeport, coming up with parts and pieces for things we find wrong on day one of the STAN can be a royal pain. The bottom line, and my opinion is, the ship seems to get the greatest benefit from a STAN held immediately before departing on a patrol.

So, there you have it, such as it is. Please don't hesitate to call with any questions. That's what we're here for.

CWO4 Frank Parent 251-441-6932





Common Myths, Mistakes & Malfunctions...

(Found during STAN & how to prevent them).

- 1. Periodic Pull tests: IAW Air Capable Ship Aviation Bulletin No. 1J, page 76, periodic pull tests on Aircraft securing, cloverleaf, and crossbar Deck fittings are only required after installation, repair, or if hot work was completed near the fittings. Otherwise, a quarterly visual inspection of the welds, crossbars, or socket cavities should be conducted IAW instructions from your MRC cards, which reference NAVSEA drawing 803-1916300. A GO-NO-GO gauge test on Crossbar fittings is done simply by placing a 7/16" wrench or gauge on the crossbar and measuring the thickness. This spacing should not be worn less than 7/16". On Cloverleaf (mushroom) fittings you only need to visually check for deformity or cracked welds.
- 2. Crash on Deck drills: Refer to Chapter 14, Shipboard-Helicopter Operations Procedures (SHOP) Manual for correct procedures. Every ship has at least minor errors, however, most ships have problems just after attending the Navy Aviation Firefighting training. This is because our procedures differ in a few ways. When advancing on a helo fire, proceed as quickly as possible until a clear path to the door is made. At this point send in "Rescuemen," but have the fire team continue. The fire team should proceed all the way to the aft end of the flight deck and check the fantail. Once everything is all clear, make reports back to the OSL. Then on the OSL direction, both teams back up to the forward peripheral line until the "Charlie" checks are complete. For FF equipment, make sure vou have two primary hoses (one each side) piped to the installed AFFF system and a secondary hose with eductor/foam. 50 gallons of foam should be readily available to the plugs. All three hoses must be long enough to reach the

aft edge of the flight deck. Lastly, ensure that (2) 15lb. CO2's and (2) 18lb. PKP bottles are on EACH side, at a minimum.

3. Fueling Procedures: On the first day of STAN, the fuel king should prepare for testing fuel as if it were an u/w day, EXCEPT for drawing/testing samples. The system should be recirculated and ready to go first thing in the morning of Day 1. There are many methods of transferring JP-5 throughout your tanks. You can transfer from the service tank to the storage, storage to storage and storage to service. However, the one absolute way NOT to transfer JP-5 is service to service through the hose. Since the service tank is your "ready" tank, you are inviting a potential problem caused by detoriating gaskets or hose linings. Each ship has a JP-5 recirc value, make sure you understand your system. Most mistakes are made when a new fuel king accepts an old salt's word. Save yourself some time, Look it up and re-trace your fuel system. I'm going to ask you to do that when I get there anyway!

- 4. <u>AVCERT vs. STAN</u>: This is a common misunderstanding. Navy civilians from NAVAIR conduct an AVCERT or ASIR. They conduct tri-annual visits to certify your ship and its equipment is compatible and in conjunction with Bulletin 1J. We, from ATC Mobile, conduct the STAN visits. The STAN visit is used to re-qualify the ship and crew and to ensure that the equipment is working properly. We also are responsible to ensure STANdard practices are being conducted on all 43 Coast Guard flight deck equipped ships. On WAGB's, we are the sole source for certification and qualification.
- 5. Testing Continuity/checking the Fuel hose: Most continuity checks are being conducted incorrectly. *Ensure that the person doing the PMS (usually the EM's), are testing continuity from the hose reel to the nozzle*. The readings take some time, but it's worth it. Get it done

right before we get there, because it's blatantly obvious to us when it's not done correctly. Two other areas most commonly missed are: Knowing the location of your strainer on the D1R & the HIFR nozzles, and making sure that there isn't any "lock-tight" or such on any hose connections.



6. <u>Tiedowns</u>: Each cloverleaf fitting is designed to take a bulb hook and the crossbar fitting is made for open hooks. The low tiedowns should attempt to get as close to a 45-degree angle forward as possible. The high tiedown attempts to achieve a 45-degree angle facing aft. Except when securing a MH-68 (HITRON) aircraft. Then the forward tiedowns are led aft to ensure exit access for the pilots.

CWO3 Rob Ratajczak



UHF Radios?



We recently received a question from a cutter wondering if they should use VHF or UHF for comms during flight quarters. Apparently, the helo crew wanted to have everyone on UHF. UHF should be for secondary, since the flight deck doesn't have UHF capability. To date, portable UHF radios have not been issued, and there are no plans to utilize them. VHF is the way to go. The LSO is on a VHF radio. The overall plan is for every ship in the fleet to utilize VHF radios when conducting flight ops. If your cutter has not yet received radios from HQ, the LSO is on the SPP. Remember, as of the Oct 2001 "Change D" update to 3710.2, there is no LSO phone talker. So for HH65 ops, the LSO should be the only one on the flight deck (unless you're doing tiedown training), because HH65 TALON use is mandatory.

Also, when you get your NVG package there should be three additional radios. Two are for flight deck use, and one is a spare for training LSO's. The bottom line with the radios is that they replace the sound powered phone for communications between the HCO and the LSO. It makes things go much easier, and as an added bonus, the LSO can now listen in on the conversations between the helo and the HCO, and talk directly to the pilot if necessary.

LCDR Ed Beale CWO4 Frank Parent



Captain, We Need More Speed!!!

A recent message from COMDT OCA has generated a lot of buzz from the Cutter fleet and H-65 AIRSTAs. The message: O 032039Z "HH-65 FLIGHT OPERATIONS" from COMDT COGARD WAHSHINTON DC//G-O, somewhat restricts Cutter takeoffs and landings for the H-65 helicopter due to concerns about engine reliability. Here is a quick aerodynamics lesson – a helicopter flies much easier if it is moving through the air with some relative airspeed; hovering or very slow airspeeds require a lot more power. For example, if an unlucky H-65 experienced a power loss as it was traveling through the air at 70 knots, it would keep flying just fine. Under most conditions, if it lost an engine at 0-15 knots, the one operating engine would not be able to provided the needed power to keep it in the air, and it would either land hard over land or ditch if over the water. Factors like temperature, aircraft weight, and true wind also determine a helo's ability to "fly out" after an engine failure.



Because of concerns with the current engine reliability in the H-65, steps have been take to mitigate the risk in the event of an engine failure. Ship-Helo Ops are prominently

mentioned in the message, and the restrictions will, under some conditions, affect a deployed H-65s time on station, ability to take passengers or carry cargo, or even launch without de-fueling.

The Cutter can improve the helo's ability to fly out after an engine failure if it provides the maximum possible relative wind to the helicopter on takeoffs and landings. (Takeoffs are usually more critical because of increased takeoff weight compared to landing weights). Of course, speeding up the ship will increase the pitch and roll proportional to the sea state. Expert ship driving will be required to obtain the optimal balance between maximum relative winds and minimal pitch and roll.

What else can be done to improve safety and adhere to the letter of the HH-65 Flight Operations Message? Here are a few suggestions:

- -Find and exercise your helo-defueling pump traditionally it is seldom used and stored away from the flight deck.
- -Consider modifying standard fuel loads and even delaying refueling until you roll out the helo for the next flight.
- -When available and approved by operational commanders, consider helo takeoff and landing from a local airstrip with recovery onboard ship at the end of its patrol with a minimal fuel load.
- -Realize that morale riders may not be able to be accommodated under most ambient conditions.
- -Coordinate closely with your AVDET pilots to adjust one aspect of your risk assessment level, based upon the helo's fly-out capability. The Ship-Helo Branch solicits feedback from the Cutter fleet regarding the practical application of the above guidance.

LCDR John Bevilacqua Ship Helo Branch Chief

Gosh Darn Helo Makes So Much Paperwork!

Yes, if your ship has a helicopter deployed you assume some additional paperwork and message traffic responsibilities. And of course, the references listing the requirements seem to be

spread all over the manual. This is where your trusty Ship-Helo Instructors come into the picture. We just love pouring over all these pubs.

The Ship-Helicopter Branch PLAD is COGARD ATC MOBILE AL//SHIP-HELO//. Your operational commander may require additional reports if deployed with a helicopter. Not all mishaps will result in a Mishap Analysis Board. If you are releasing a mishap message and the mishap was captured on the CCTV, COMDT requires a copy be sent to the Ship-Helo Branch.

LCDR Ed Beale



3710.2D required messages							
Message	Message Reason it needs to be sent Required Addees		Ref				
Waiver to 3710	Deviation from manual	Action: G-OCA via chain INFO: Ship-Helo Branch	(1.A.2.b)				
Post-deploy Report	Post Deployment	Action: Normal addees INFO: G-OCA, G-SEA, G-WKS Ship-Helo Branch	(1.C.12, fig F-1)				
Casualty affecting AVCERT	Something breaks and when it gets fixed (in addition to CASREP)	Action: Operational Cdr, G-OCA, G-UCU, NAVAIRWARCENACDIVLKE, INFO: Ship-Helo Branch	(4.A.1)				
Aircraft Mishap	Aircraft crashes, breaks, etc.	Action: COMDTINST M5100.47 Also - send video to Ship-Helo	(Fig D-1) (6.B.2.c)				

NVG UPDATE



Ship-Helo has made serious progress in qualifying ships for NVG Ops during the last few months. PACAREA Cutters are now 75% NVG Compatible, with only the ACTIVE, JARVIS, RUSH, and MIDGETT pending their initial qual. The ACTIVE and MIDGETT should be qualified by early November. LANTAREA Cutters are now 50% NVG compatible. Every H-65 AISTA now has a cadre of pilots that should, with close coordination, be able to provide DLQ opportunities to keep Cutter LSOs NVG current.

Ship-Helo Branch routinely receives feedback from both the Surface and Aviation

regarding NVG Shipboard communities operation. The most prevalent point of confusion from Cutters conducting NVG Ops concerns shipboard lighting configuration. Let's start out with a bold statement: The purpose for the NVG retrofit subsequent NVG flight Ops is NOT to make your Cutter more conducting while Enforcement missions. Rather, the purpose is to improve safety and comfort levels for both the helo and Cutter. We have received several reports lately of Cutters conducting NVG Operations "darkened ship", or without any of the flight deck lighting illuminated. More common is the practice of illuminating only SOME of the required flight deck lighting, for instance, the Deck Surface Floodlights, but not the overhead floodlights. This violates both the letter and spirit of COMDTINST 3710.2D, and is simply unwise. Cutters and AVDETs, be aware that the Coast Guard spent a lot of money and effort on the NVG retrofit, and there are plenty of reasons to use the full flight deck lighting package as it was intended. Here are a few reasons:

-Under most ambient lighting conditions, a darkened or dimly flight deck is basically invisible to the HCO. The HCO cannot maintain adequate situational awareness if the

flight deck is pitch black. The CCTV camera has low light, but not NVG capability, and flight deck lighting is required to obtain reasonable picture quality on the HCO's CCTV.

-Pilots conducting NVG landings on flight decks use peripheral cues from that portion of their scan that is under the NVG tube. As they move in over the flight deck the unaided visual cues are critical in improving depth perception and the ability to detect closure rate. If the flight deck is too dark, these visual cues disappear.

-Deck personnel safety is critical during NVG Ops. With zero, or greatly subdued lighting, the tiedown personnel have a difficult time tying down your helo. Inability to see hazards increases the risk of tripping and falling.

Most pilots have reported that, under most ambient conditions, deck lighting intensity of 80-100% is perfectly comfortable and workable while wearing NVGs. Experiment with your lighting intensities, but do not get so close to "zero" that the deck is a black hole!

A final note on lighting – we must emphatically reemphasize that non-NVG compatible lighting, visible to the pilots on approach, takeoff, or in the NVG pattern, shall be secured. There is not much that this does not include. ALL (Ship's) NAV LIGHTS MUST BE TURNED OFF FOR NVG OPS. includes the Masthead light. Their intensity and spectrum is so incompatible with NVG operations that they can cause complete whiteout of the NVGs when viewed from certain distances and azimuths. This scenario turns an otherwise great safety tool into a useless detriment, and greatly increases the risk of a mishap. HCOs, LSOs, Ops Officers, and

deployed pilots should be knowledgeable about NVG lighting configurations, proper nomenclature, and adjustment procedures. The SHOPs addresses Cutter lighting configuration in depth – as always, contact the Ship-Helo Branch if you need clarification of further info.

LCDR John Bevilacqua

Ship-Helo Branch Chief

ENGINEER'S CORNER

"NAVAIR CERT AND THE SHIP'S AEL"



Hello shipmates and a happy new fiscal year to you all. I recently attended the Navy's AEL conference in Norfolk, VA. The NAVAIR branch reported that a number of our cutters did not have current AEL(s). The truth of the matter is that NAVAIR did not have a current copy of the AEL. I went back to Mobile and contacted the ELC and made sure that our cutters were all sent a current copy of the AEL. I have started the bridgework between the ELC and the Navy to establish our AEL with NAVAIR. If you are not sure you have the correct AEL contact CWO Bryan O'Sullivan at ELC Baltimore for validation of your AEL. It got me to thinking, "How current is our AEL?" The Ship-Helicopter Branch is reviewing our current AEL and will report any discrepancies to the ELC for correction.

What's This?

Each Newsletter will have a picture of equipment used for shipboard helicopter operations. Can you identify it? The answer will be in the next newsletter.



Last month's "What's This?" answer is: pneumatic defueling pump used by to defuel the helo.

The Ship-Helo Newsletter Needs You!



We are always looking for articles and/or photos for the Ship-Helo Newsletter. Please email them to awaters@atc.uscg.mil with the subject: Newsletter Article or Photo. Snail mail can be sent to the address to the right:





Questions / Comments

The Ship-Helo Branch enjoys receiving questions and/or suggestions. Please feel free to contact us.

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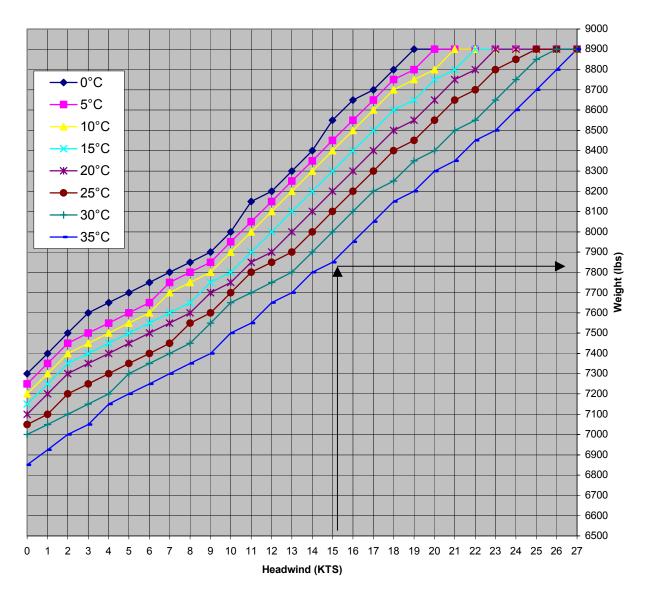
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The above graph depicts how wind & temperature will affect helicopter performance at different gross weights. To utilize this chart for planning purposes, enter the bottom of the chart at the relative wind your ship can generate based on current conditions. Go up the chart until you've reached the current temperature line. Go to the right from there. This weight indicated on the right of the chart is the maximum gross weight for the helicopter for those conditions. This is a derivative work; so if you're going to be close to a limiting operating weight, Refer to the A-37 chart in the HH65 Flight Manual. In all cases, consult your senior aviator.